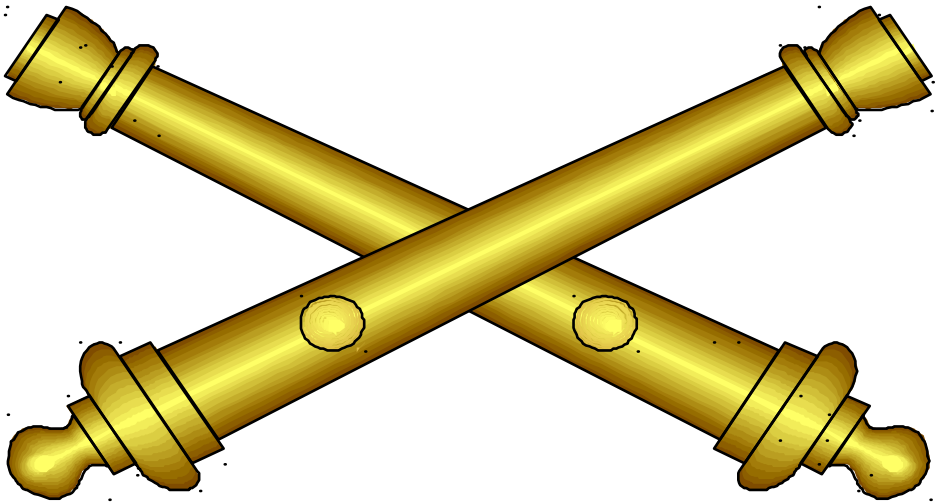
BATTERY DEFENSE



BATTERY DEFENSE

AGENDA

- INTRODUCTION
- RESPONSIBILITIES OF KEY PERSONNEL
- AVAILABLE DEFENSIVE WEAPONS
- TACSOP RESPONSIBILITIES
- BATTERY AND PLATOON DEFENSE
- DEFENSE DIAGRAMS
- RANGE CARDS (HOWITZER & CREW SERVED WEAPONS)
- TE&O’s
- SUMMARY

BATTERY DEFENSE

UNIT DEFENSE

"The enemy will direct actions against the field artillery to suppress neutralize , and/or destroy our capability to fight. All field artillerymen must know and apply passive and active defense measures against artillery, air and ground attacks if they are to survive and provide continuous and responsive fire support". (FM 6-50)

BATTERY DEFENSE

ESTABLISHING THE DEFENSE

**DISPERSION AND DISPLACEMENT COMPLICATE THE LEADER'S TASK
OF ESTABLISHING A VIABLE DEFENSE. IT MUST BE REMEMBERED THAT;**

- **THE TACTICAL SITUATION**
- **GUIDANCE FROM HIGHER HEADQUARTERS**
- **CONSIDERATION OF THE FACTORS OF METT-T**

DICTATE WHAT SPECIFIC DEFENSIVE MEASURES THE UNIT COMMANDER WILL TAKE IN A PARTICULAR SITUATION.

COMMANDERS MUST CONSTANTLY ASSESS THE BENEFIT OF SURVIVABILITY GAINED THROUGH DISPERSION AGAINST THE COMMAND AND CONTROL GAINED BY A CLOSE POSITION.

BATTERY DEFENSE

USE THE FACTORS OF METT-T IN YOUR DEFENSIVE PLANNING

MISSION
ENEMY
TERRAIN
TROOPS
TIME AVAILABLE

BATTERY DEFENSE

MISSION

E

T

T

T

RECEIVE YOUR MISSION FROM HIGHER HQ

ATTACK or DEFEND

Special Considerations

1. **MOVEMENT CRITERIA**
2. **SPECIAL MISSIONS**
3. **RAIDS**
4. **COPPERHEAD**
5. **FASCAM**

BATTERY DEFENSE

M
ENEMY
T
T
T

WHAT IS THE THREAT?

COUNTER FIRE
mortars, rockets, artillery?
GROUND
armor, infantry, special forces, guerilla's?
AIR
bombers, fighters, helicopters?
OTHER
counter fire radar, UAV’s, terrorists

BATTERY DEFENSE

M
E
TERRAIN AND WEATHER
T
T

STUDY TERRAIN USING = OCOKA

OBSERVATION

COVER AND CONCEALMENT

OBSTACLES

KEY TERRAIN

AVENUES OF APPROACH

BATTERY DEFENSE

M
E
T
TROOPS
T

AVAILABLE TROOPS

HOW MANY?

TRAINING LEVEL?

INFANTRY?

ARMOR?

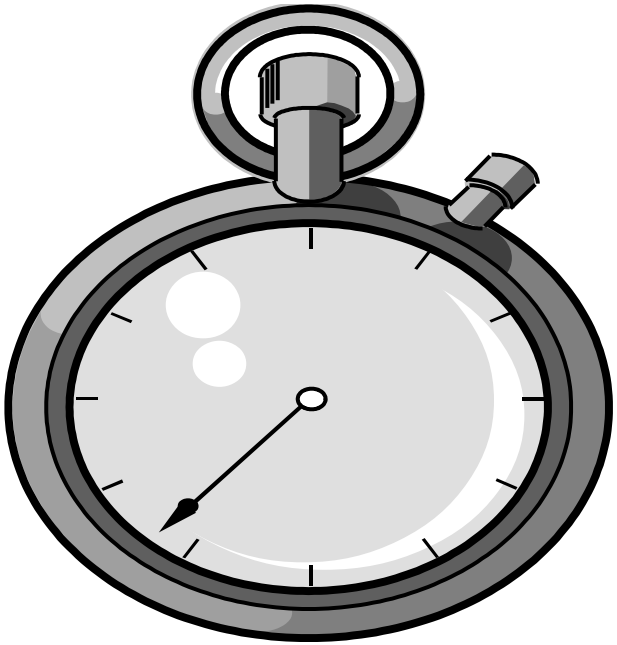
<u>ARTILLERY</u>

READINESS?

BATTERY DEFENSE

M
E
T
T
TIME

DURATION OF EMPLACEMENT
CONTINUOUS POSITION IMPROVEMENT
PLANNING TIME USE 1/3 TO 2/3 RULE FOR SUBORDINATES



BATTERY DEFENSE

TACSOP RESPONSIBILITIES

THE BATTERY LEADERSHIP MUST ENSURE THAT THE BATTERY TACSOP GIVES PROCEDURES FOR DEALING WITH;

NBC ATTACKS (SHOULD COVER PROTECTIVE MEASURES, IMMEDIATE ACTION, DECONTAMINATION, AND REPORTING)

ARTILLERY ATTACKS (SHOULD COVER CODE WORDS FOR EMERGENCY MOVEMENT, MOVE CRITERIA AND REPORTING)

AIR ATTACKS (SHOULD COVER ADA CONTROL STATUS, CODE WORDS FOR EMERGENCY MOVES AND REPORTING)

GROUND ATTACKS (SHOULD COVER SECTOR SKETCHES, DEFENSE DIAGRAMS, KILLER JUNIOR, DIRECT FIRE, EMERGENCY MOVES AND REPORTING)

BATTERY DEFENSE

RESPONSIBILITIES OF KEY PERSONNEL

PRIORITIES

a. The BC or platoon leader may be instructed to continue the mission in the current position despite hostile counter fire. In that case, he might establish the following tasks in the priority indicated:

1. Harden critical items of equipment

2. Prepare individual fighting positions.

3. Prepare defensive positions.

4. Select alternate positions, displacement routes, and a signal in case movement is unavoidable. Brief
key personnel on this information.

5. Camouflage.

All battery leaders must become familiar with the defense plan, rehearse the plan, and brief their subordinates on its execution.

BATTERY DEFENSE

RESPONSIBILITIES OF KEY PERSONNEL

PRIORITIES CONT.

b. The BC or platoon leader may be instructed to displace upon receiving fire. He would have a different list in mind. For example, he might establish the following tasks to be done before receiving incoming fire.

1. Camouflage.

2. Prepare limited protection for personnel and equipment.

3. Reconnoiter and/or select alternate positions, displacement routes, and march-order signal.

4. Prepare alternate positions.

5. Prepare defensive positions.

6. Improve individual protection.

7. Improve equipment protection.

All battery leaders must become familiar with the defense plan, rehearse the plan, and brief their subordinates on its execution.

BATTERY DEFENSE

RESPONSIBILITIES OF KEY PERSONNEL

Once the BC's time line and defensive priorities are established, the platoon leader will coordinate with the platoon sergeant to accomplish the following:

1. Establish a rally point immediately upon occupation.

2.Develop the platoon defensive plan

3. Supervise the defense forces.

4. Direct and sight in the positioning and preparation of the following:
   - Crew served weapons.
   - Anti-tank weapons.
   - Observation posts and/or listening posts.

5. Ensure that communications are installed, checked, and functioning.

6. Designate air TRPs.

BATTERY DEFENSE

RESPONSIBILITIES OF KEY PERSONNEL

Once the BC's time line and defensive priorities are established, the platoon leader will coordinate with the platoon sergeant to accomplish the following:

7. Select positions for TRPs and range markers.

8. Organize and rehearse the reaction force.

9. Ensure that unit members know equipment and/or material destruction procedures.

11. Ensure that howitzer direct fire targets are established and integrated into overall defensive plan.

12. Ensure that killer junior targets are computed by the FDC and distributed to each howitzer section and that each section chief knows how to compute 10/R.

14. Ensure there is a plan for medical evacuation.

BATTERY DEFENSE

RESPONSIBILITIES OF KEY PERSONNEL

The Section Chief does the following:

- Ensures that the howitzer range card is prepared according to the sectors assigned by the Platoon Sergeant/1SG.

- Studies the route to and locations of alternate and supplementary positions.

- Ensures that the crew served weapons range cards are prepared in accordance with assigned sectors.

- Ensures that individual and crew-served fighting positions are properly prepared and have overhead cover.

BATTERY DEFENSE

Table 3-2. **Sample duties assigned (unit to maintain present position)**

SECTION CHIEF	GUNNER	ASSISTANT GUNNER	SECTION MEMBERS	DRIVER
Prepare range card	Sandbag the collimator.	Install camouflage net.	Harden critical items of equipment with sandbags (M992, all truck tires, and so forth.)	Bury the wire.
Brief personnel on displacement route(s), alternate position, and signals to be used.	Help with camouflage.	Continue to improve camouflage; for example, use natural vegetation.	Prepare individual and defensive positions.	Become familiar with displacement route(s).
Supervise at supplementary position; assign members to crater analysis team.[1]	Continue to improve camouflage.	Prepare supplementary position.	Selected members prepare supplementary positions.	Help at supplementary position.
Take cover, mask and/or vest, and man defensive positions as necessary.				
Continue the mission.				

[1] Crater analysis data should be reported by use of the shelling report (SHELREP), bombing report (BOMREP), rocketing report (ROCKREP), or mortar bombing report (MORTREP) format outlined in FM 6-121 and STANAG 2008.

BATTERY DEFENSE

Table 3-3. **Sample duties assigned (unit allowed to displace)**

SECTION CHIEF	GUNNER	ASSISTANT GUNNER	SECTION MEMBERS	DRIVER
Prepare range card	Sandbag the collimator.	Install camouflage net, and improve with vegetation.	Help with camouflage.	Bury the wire.
Brief personnel on displacement route(s), alternate position, and signals to be used.	Supervise preparation of alternate position.	Continue to improve camouflage.	Selected members continue camouflage and prepare alternate position.	Become familiar with displacement route(s).
Supervise preparation of individual and defensive position.	Supervise improvement of equipment protection.	Help at individual and defensive positions.		Help at supplementary position.
Take cover; mask and/or vest as necessary.				
Continue the mission while awaiting signal to displace.				
Displace as per prior instructions.				

BATTERY DEFENSE

DEFENSIVE CONCEALMENT

FIRING POSITIONS SHOULD BE SELECTED THAT ALLOW THE HOWITZER SECTIONS THE MAXIMUM ABILITY TO HIDE WHILE

CONTINUING TO OPERATE. SOME EXAMPLES OF AREAS WITH CONCEALMENT ARE;

TREE LINES
WADIS/STREAM BEDS
BUILT-UP AREAS (BUILDINGS, WAREHOUSES, UNDER BRIDGES)

IF THE BATTLE BECOMES STATIC, CAMOUFLAGE DISCIPLINE SHOULD BE RIGOROUSLY ENFORCED AND CAMOUFLAGE NETS
MAY BE USED TO EFFECTIVELY CONCEAL THE UNIT.

BATTERY DEFENSE

AVAILABLE DEFENSIVE WEAPONS

THE BATTERY HAS A GREAT AMOUNT OF FIREPOWER THAT CAN BE TRAINED AGAINST ATTACKERS.

- DIRECT FIRE BY THE HOWITZER **MAX EFFECTIVE RANGE……. 2200 METERS**
- M2 .50 CAL MG **MAX EFFECTIVE RANGE……. 2000 METERS**
- M60 MACHINE GUNS **MAX EFFECTIVE RANGE……1100 METERS**
- MK19 GRENADE LAUNCHERS **MAX EFFECTIVE RANGE……1500 METERS**
- M18-SERIES MINES **MAX EFFECTIVE RANGE……50 METERS**
- ANTITANK WEAPONS (AT-4) **MAX EFFECTIVE RANGE…… 500 METERS**
- M16A2 5.56-MM RIFLES **MAX EFFECTIVE RANGE…… 800 METERS**
- M9 PISTOL **MAX EFFECTIVE RANGE……50 METERS**

BATTERY DEFENSE
DIRECT FIRE

KILLER JUNIOR
155 MM - HE/TI FUZE
MINIMUM RANGE 200 METERS, MAXIMUM 1400 METERS

155MM - HE/PD
MINIMUM RANGE 200 METERS, MAXIMUM 2200 METERS

APICM
155MM
HIGH ANGLE
MINIMUM RANGE 300/400 METERS

THE BC COORDINATES MUTUAL DEFENSIVE FIRES THROUGH THE BATTALION S3. SUPPORT WITH FRIENDLY UNITS WITHIN AND NEXT TO THE POSITION AREA IS COORDINATED FACE TO FACE BETWEEN THE COMMANDER OR NCOIC OF THE NEARBY UNIT AND THE GSG, THE 1SG OR THE BC.

BATTERY DEFENSE

OBSTACLES

MINES

M15 ANTI-TANK

M16 ANTI-PERSONNEL (30 METERS)

M18 ANTI-PERSONNEL “CLAYMORE” (50 METERS)

PYROTECHNICS

TRIP WIRES

FLARES

CONCERTINA WIRE

DOUBLE OR TRIPLE STRAND

BATTERY DEFENSE

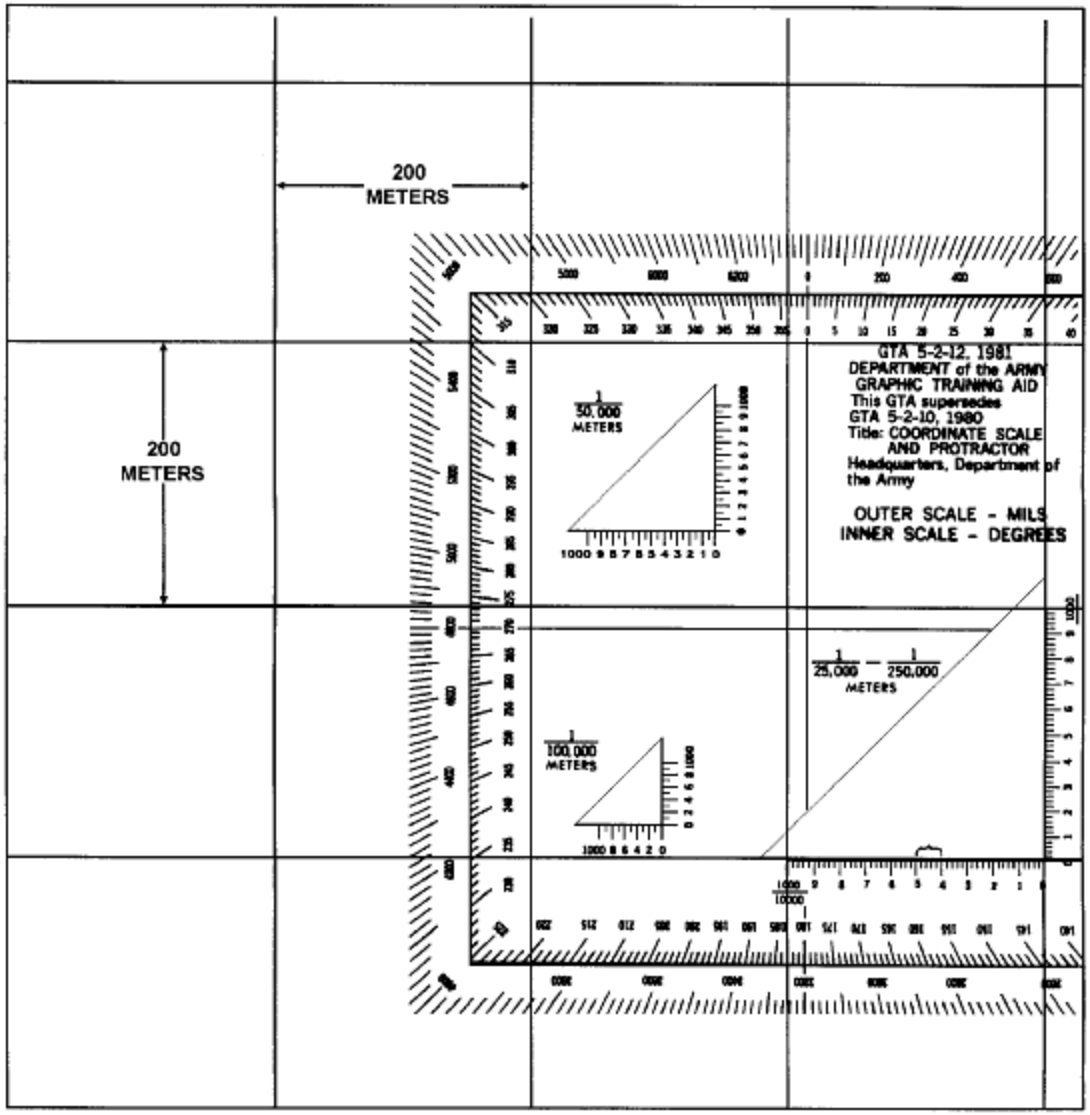
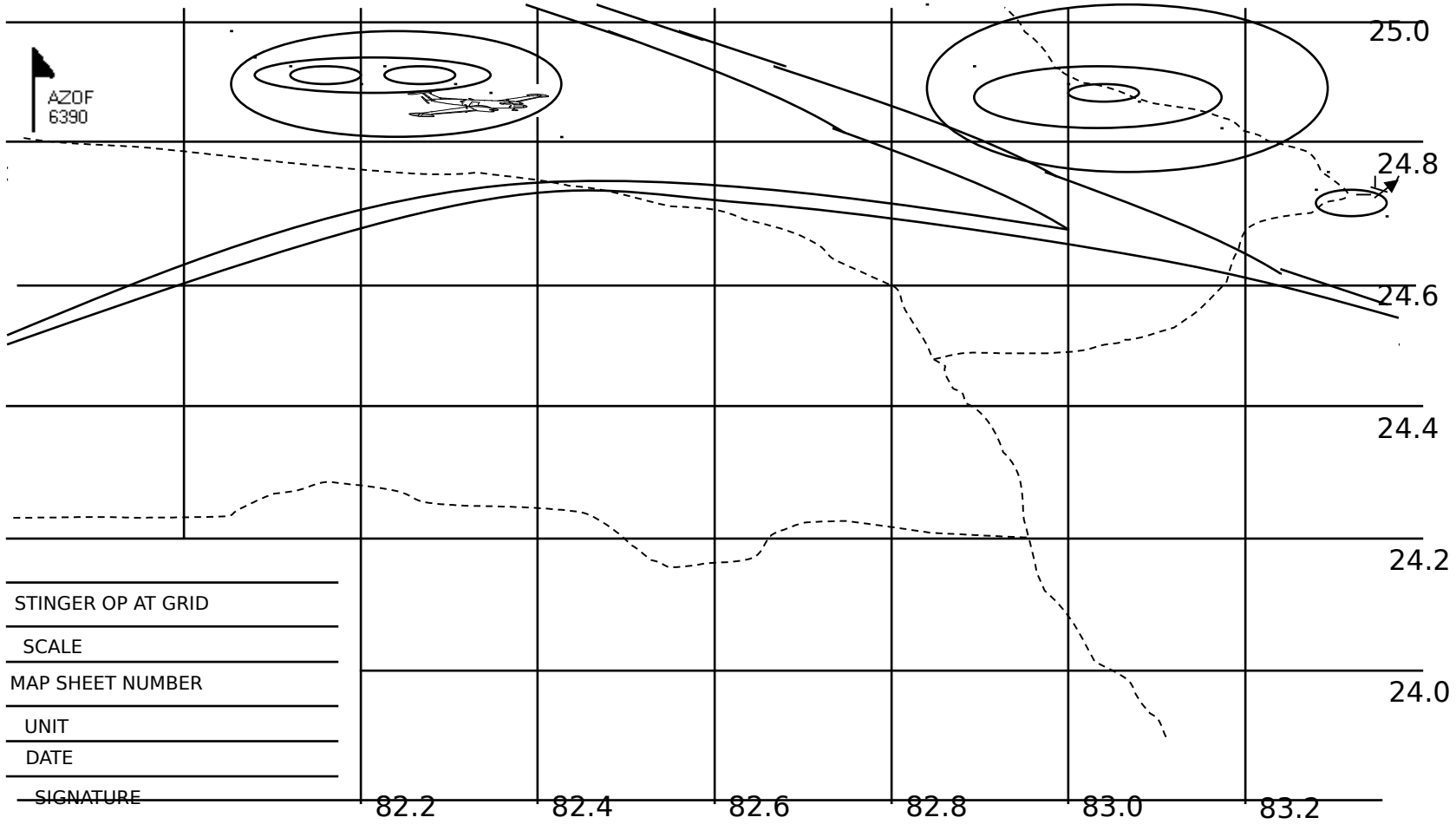
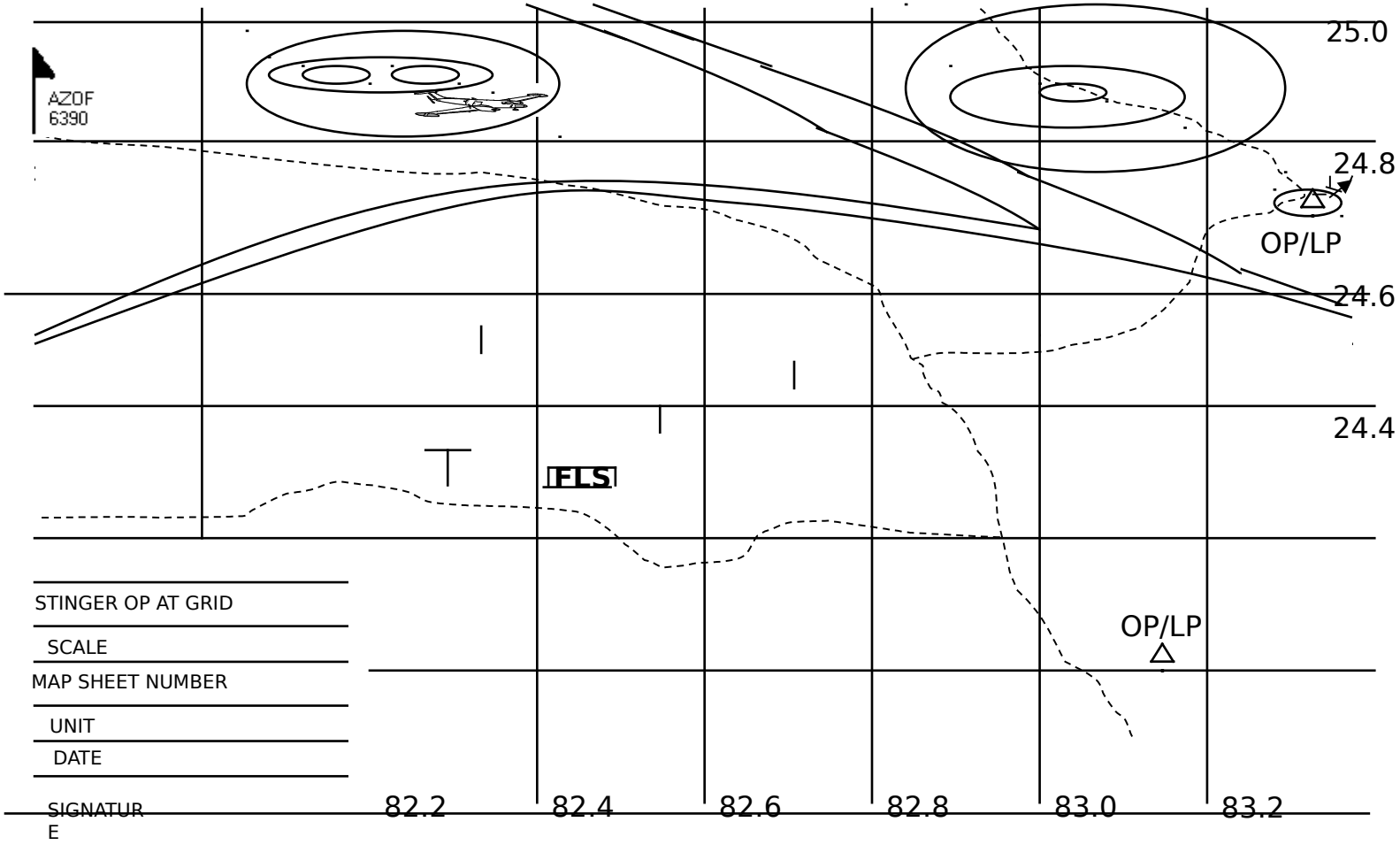


Figure 3-3. **Defense diagram matrix with a scale of 1:5,000**

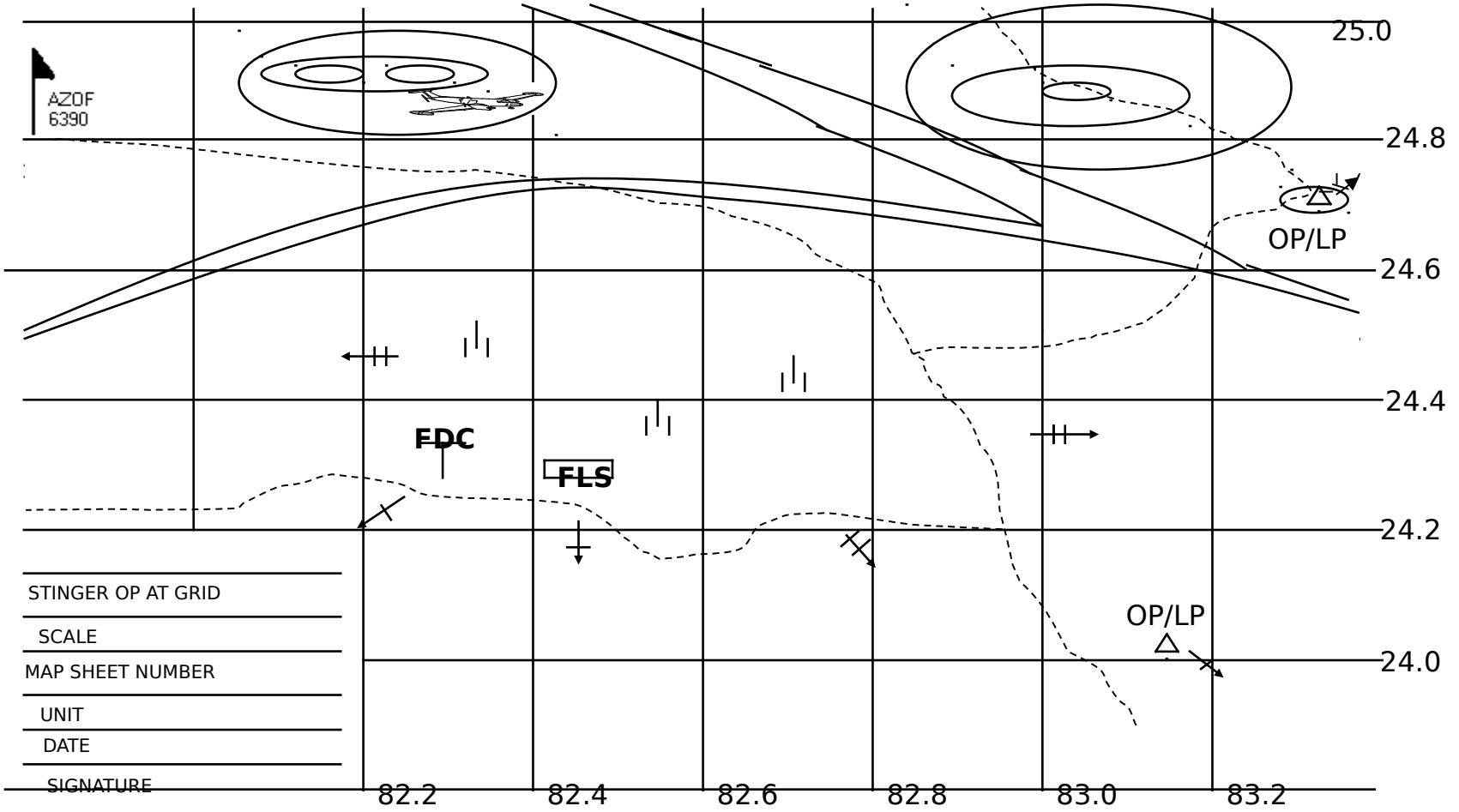
BATTERY DEFENSE



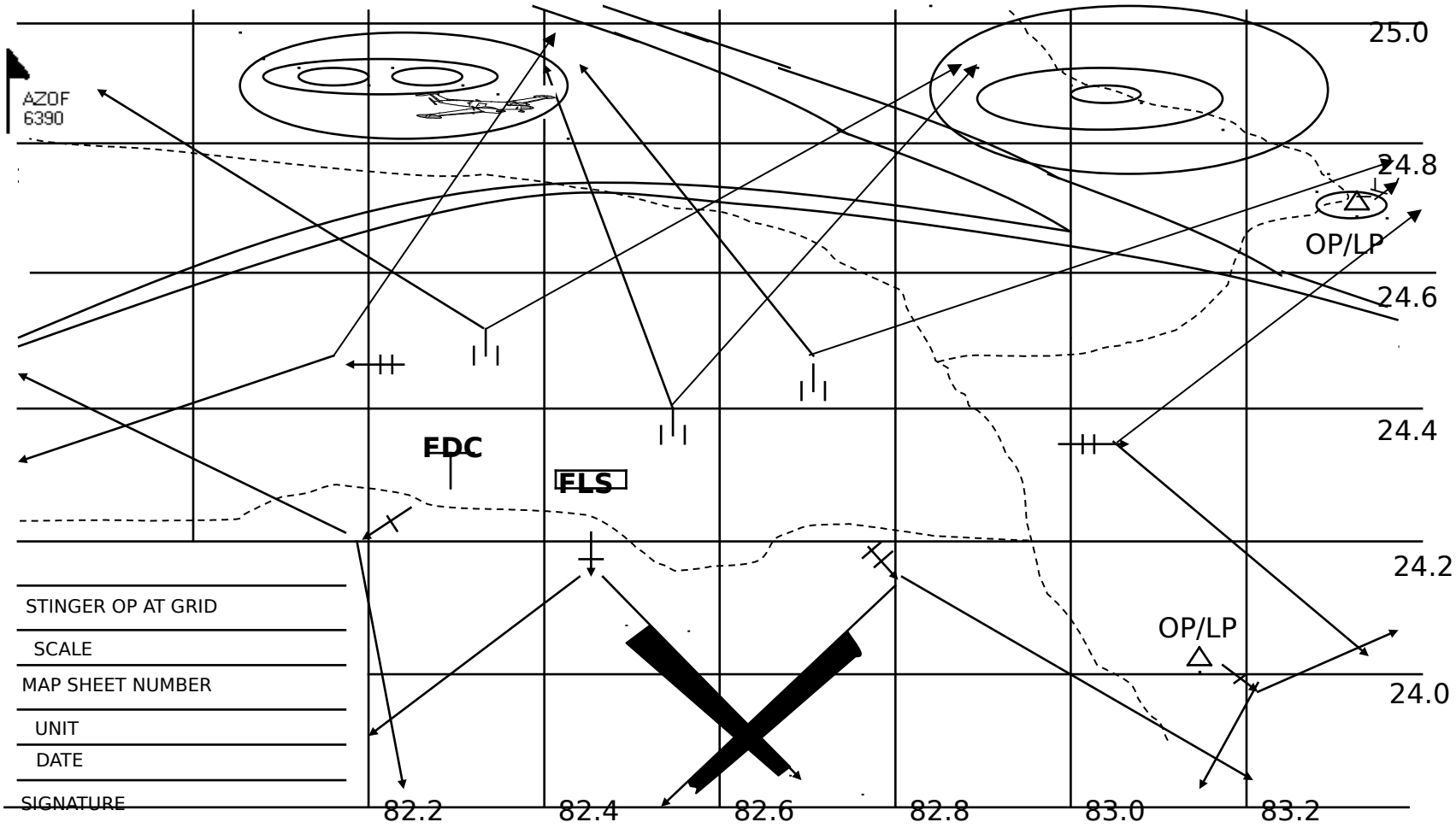
BATTERY DEFENSE



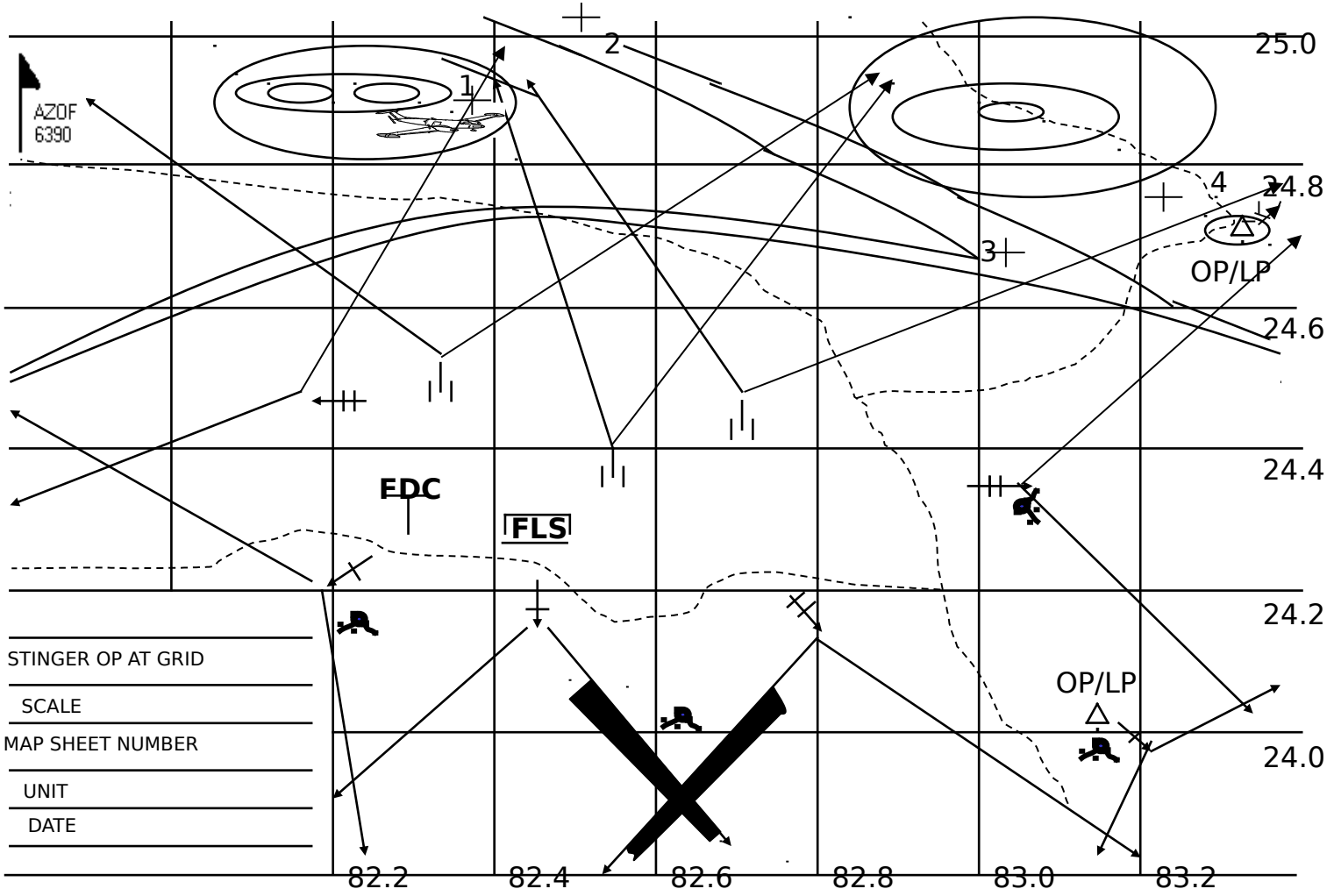
BATTERY DEFENSE



BATTERY DEFENSE



BATTERY DEFENSE



BATTERY DEFENSE

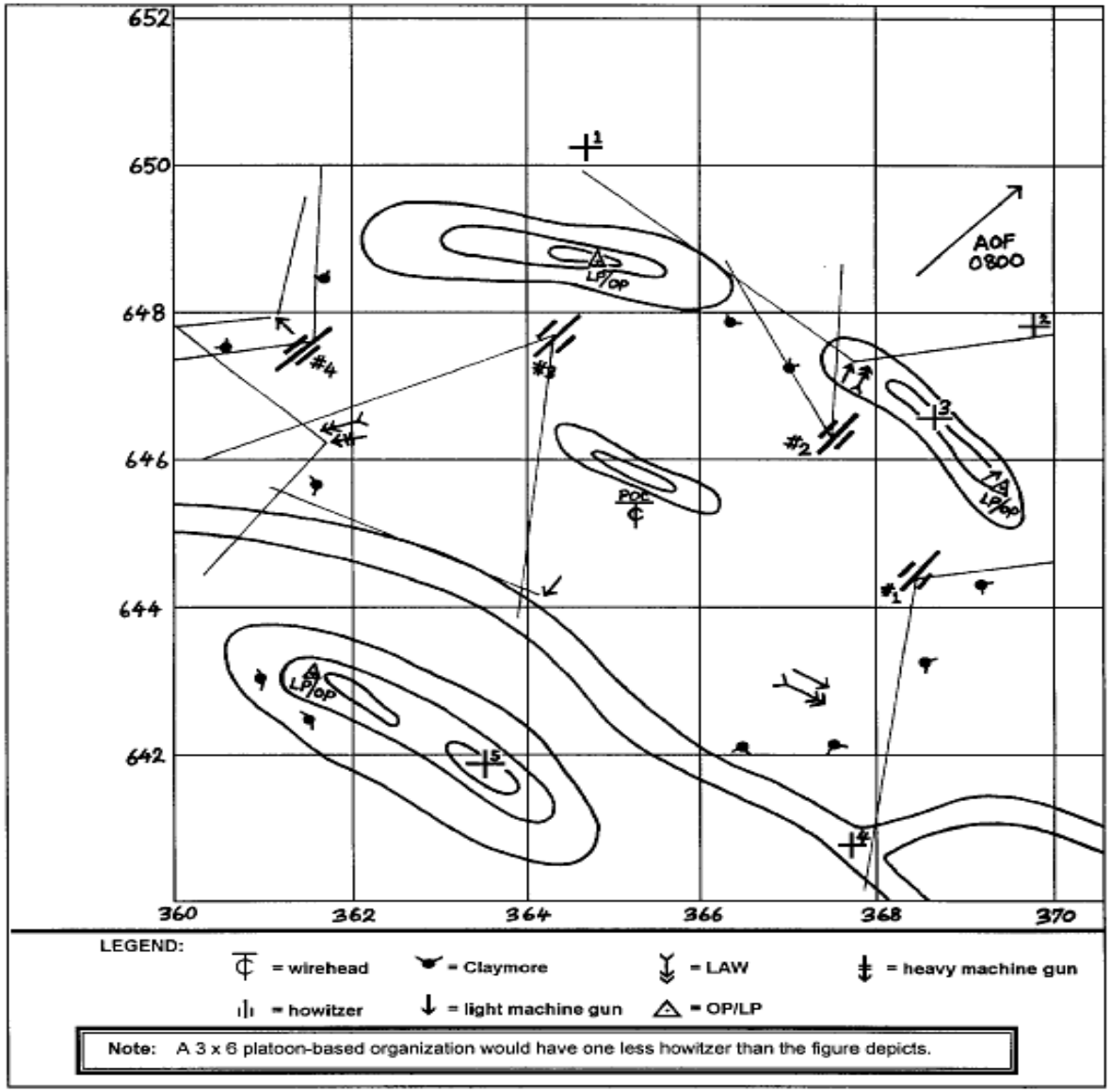
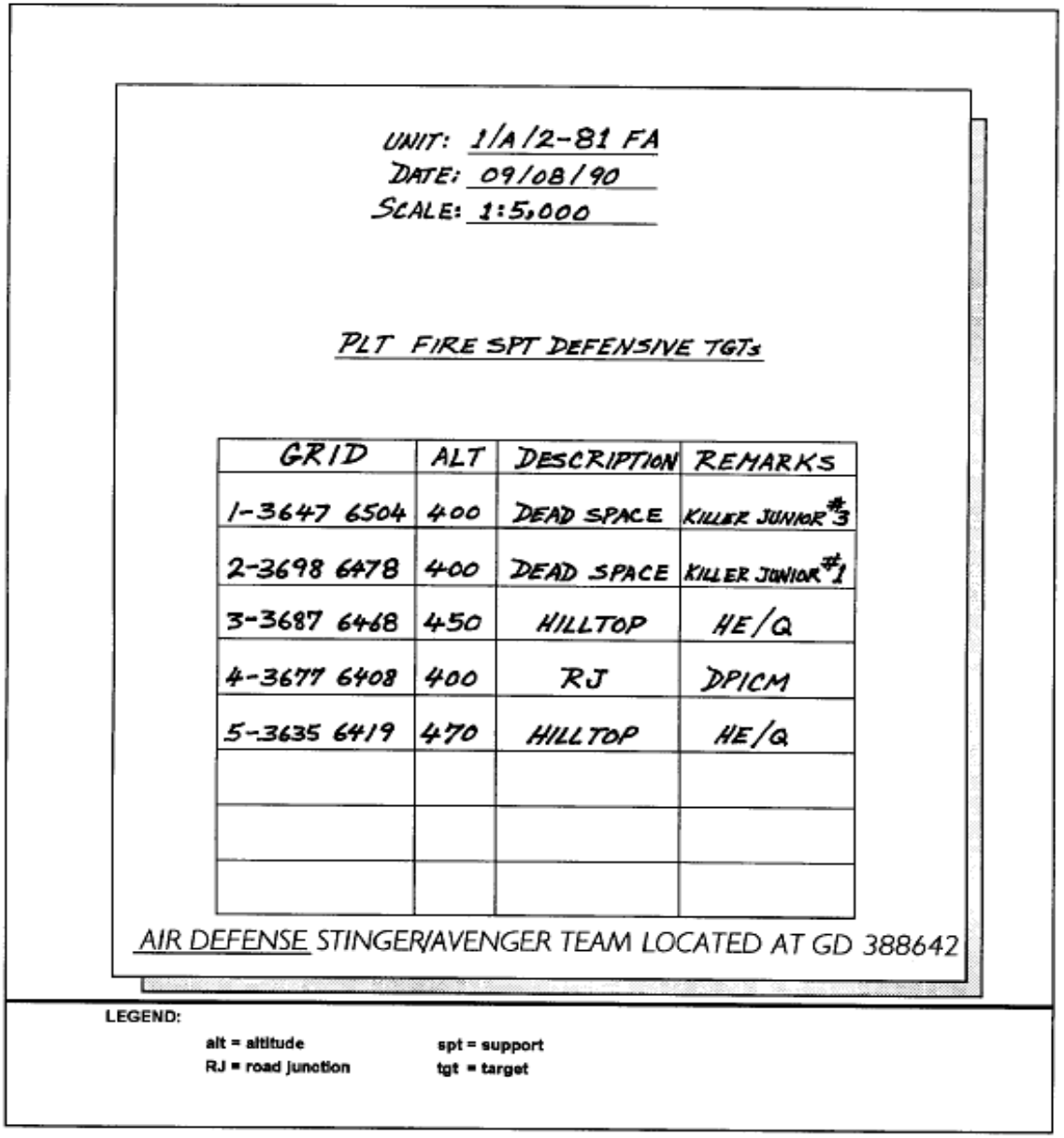


Figure 3-5. **Defense diagram (scale 1:5,000) for a platoon**

BATTERY DEFENSE



UNIT: 1/A/2-81 FA
DATE: 09/08/90
SCALE: 1:5,000

PLT FIRE SPT DEFENSIVE TGTs

GRID	ALT	DESCRIPTION	REMARKS
1-3647 6504	400	DEAD SPACE	KILLER JUNIOR #3
2-3698 6478	400	DEAD SPACE	KILLER JUNIOR #1
3-3687 6468	450	HILLTOP	HE/Q
4-3677 6408	400	RJ	DPICM
5-3635 6419	470	HILLTOP	HE/Q

AIR DEFENSE STINGER/AVENGER TEAM LOCATED AT GD 388642

LEGEND:

alt = altitude
RJ = road junction
spt = support
tgt = target

Figure 3-6. **Related information**

BATTERY DEFENSE

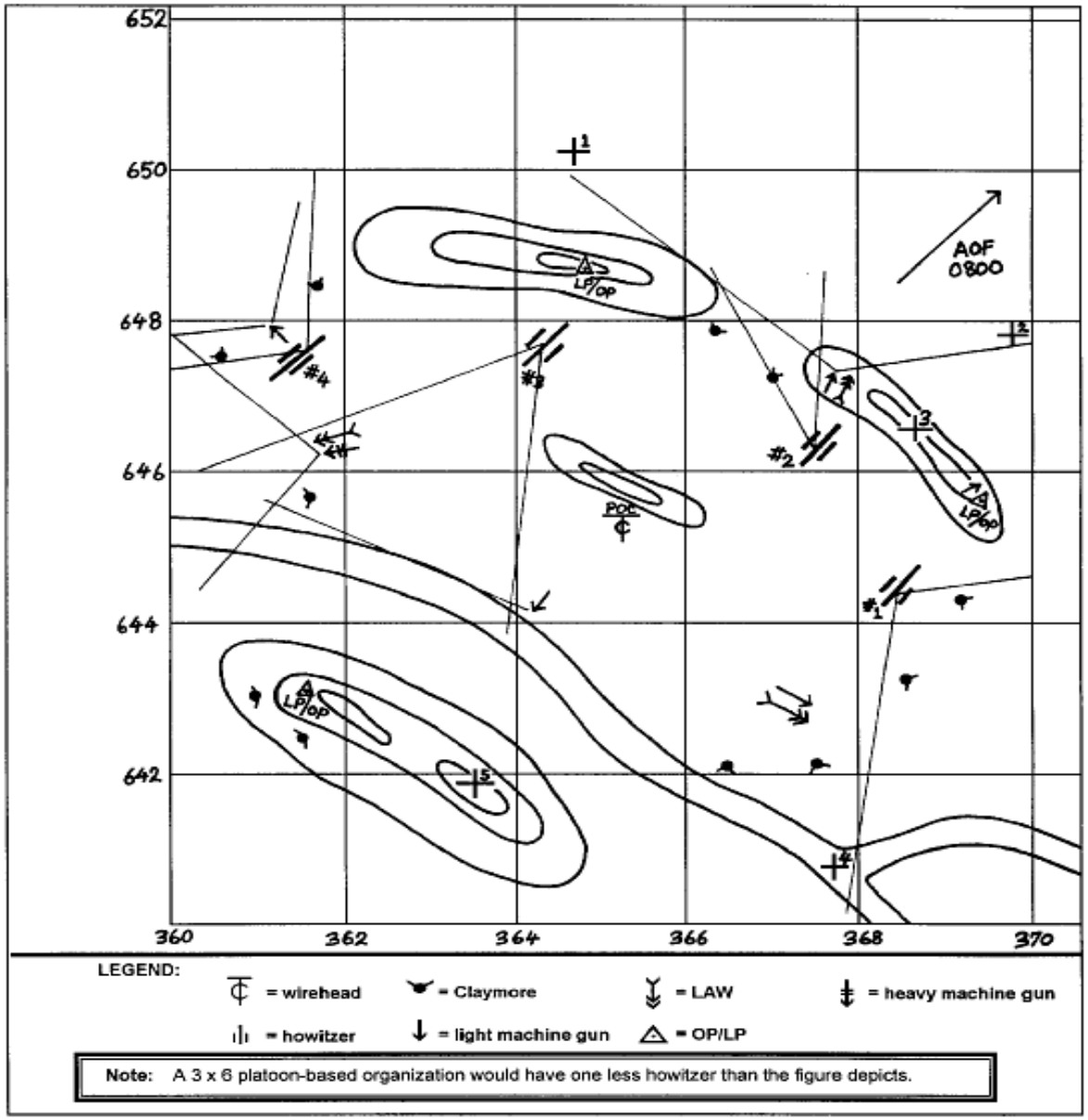
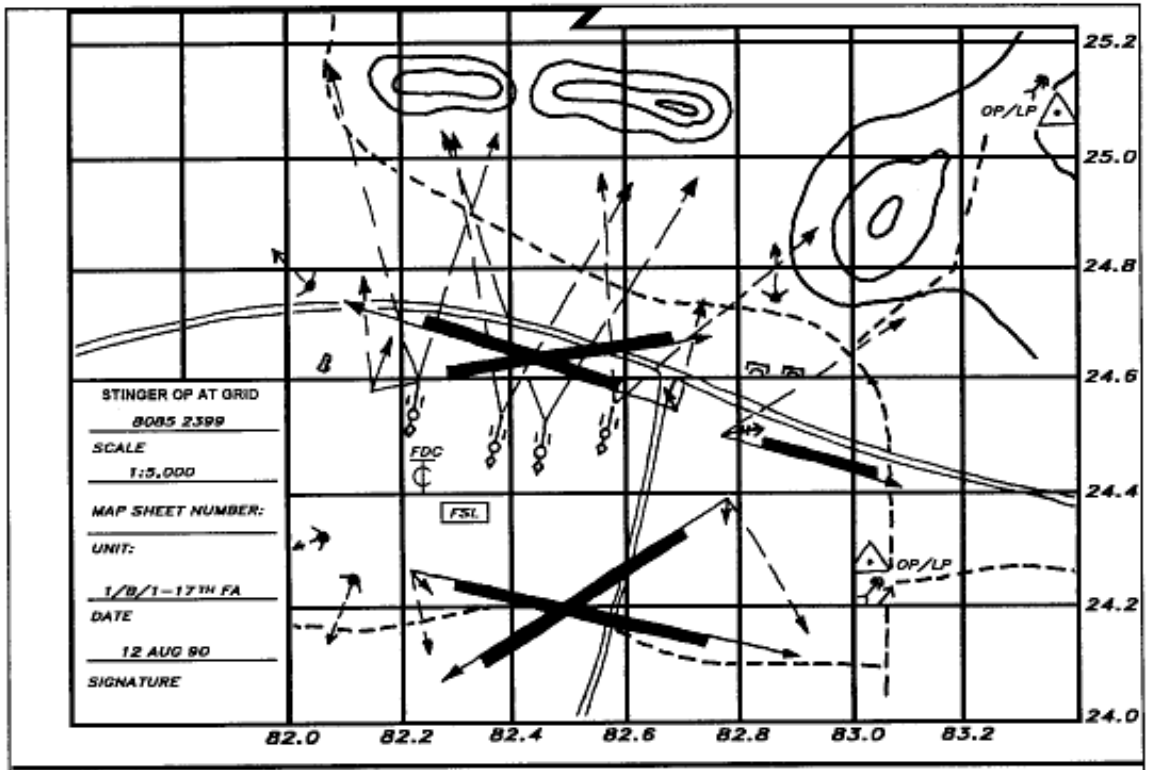


Figure 3-5. **Defense diagram (scale 1:5,000) for a platoon**

BATTERY DEFENSE



LEGEND:

- = LAW
- = Claymore
- = light machine gun
- = heavy machine gun
- = medium SP artillery
- = trail
- = wirehead
- = OP/LP

Notes:

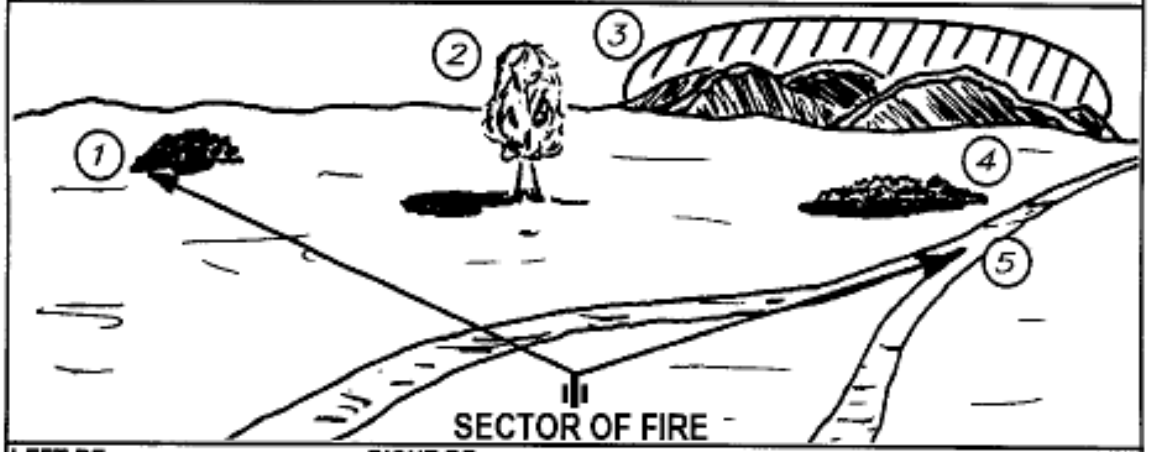
1. Unit shown is 155-mm SP platoon.
2. See FM 101-5-1 or STANAG 2019 for military symbols used in defense diagrams.
3. Assistant gunners on all machine gun positions should be armed with M203 grenade launchers to cover the dead space.
4. A 3 x 6 platoon-based organization would have one less howitzer than the figure depicts.

Figure 3-9. **Completed defense diagram**

BATTERY DEFENSE

HOWITZER RANGE CARD

For use of this form, see FM 6-50. The proponent agency is TRADOC.



LEFT DF 3800 RIGHT DF 2031

NO.	SHELL	CHG	FZ	TI	DF	QE	RANGE	DESCRIPTION	REMARKS
1	HE	8	Q	—	3800	3	400	ROCK PILE	
2	HE	8	Q	—	3015	2	450	TREE	
3	HE	8	Q	—	2800	6	500	DEAD SPACE	SWEEP 200 m
4	HE	8	Q	—	2447	4	300	HEDGE ROW	
5	HE	8	Q	—	2031	4	250	ROAD JUNCTION	

DA FORM 5699-R, AUG 88

Figure 3-7. **Howitzer range card**

BATTERY DEFENSE

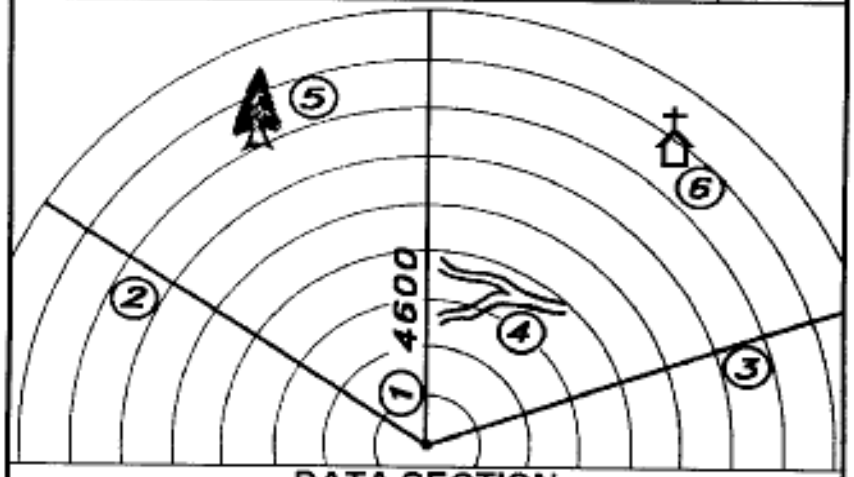
STANDARD RANGE CARD

For use of this form see FM 7-7J. The proponent agency is TRADOC.

SQD 1st
PLT 1st
CO B

May be used for all types of direct fire weapons.

MAGNETIC NORTH



DATA SECTION

POSITION

DATE 22 MAY

WEAPON M60 MG

EACH CIRCLE EQUALS METERS 100

NO.	DIRECTION DEFLECTION	ELEVATION	RANGE	AMMO	DESCRIPTION
1	4600				PDF
2	L 3800				L DIRECTION
3	R 5900				R DIRECTION
4	R 4880		350		ROAD JUNCTION
5	L 4050		750		LARGE TREE
6	R 5100		800		OLD CHURCH

REMARKS

DA FORM 5517-R, FEB 86

Figure 3-8. **Machine gun range card**

BATTERY DEFENSE

SUMMARY

- RESPONSIBILITIES OF KEY PERSONNEL
- AVAILABLE DEFENSIVE WEAPONS
- TACSOP RESPONSIBILITIES
- BATTERY AND PLATOON DEFENSE
- DEFENSE DIAGRAMS
- RANGE CARDS (HOWITZER & CREW SERVED WEAPONS)
- TE&O’s

BATTERY DEFENSE

QUESTIONS?